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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/696,052	10/25/2000	Gerard Chauvel	TIF-29339	3869

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EXAMINER

CONNOLLY, MARK A

ART UNIT	PAPER NUMBER
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2115

DATE MAILED: 02/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/696,052

Applicant(s)

CHAUVEL ET AL.

Examiner

Mark Connolly

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Sunakawa et al¹ [Sunakawa] EP No 0683451A2.

3. Referring to claim 1, Sunakawa teaches the processor comprising a plurality of processing modules, comprising the steps of:

a. calculating consumption information for a plurality of scenarios for executing a plurality of tasks, the consumption information of each scenario based on probabilistic values for activities associated with the tasks [Abstract].

b. executing the tasks according to a selected scenario on said plurality of processing modules responsive to said consumption information [Abstract].

4. Referring to claim 2, Sunakawa teaches monitoring the actual activity occurring and modifying the execution of tasks based on the monitoring step [Abstract].

5. Referring to claim 3, Sunakawa teaches providing maximum performance within thermal constraints [page 3 lines 45-50 and page 15 line 56 – page 16 line 9].

¹ As cited by the applicant

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6. Referring to claim 4, Sunakawa teaches executing the tasks on a plurality of processing modules responsive to said consumption information in order to execute the tasks using the lowest possible energy consumption [Abstract and page 4 lines 28-30].
7. Referring to claim 5, Sunakawa teaches:
 - a. generating a task allocation scenario [page 9 lines 7-28 and figs 7, 8A and 8B].
 - b. estimating the activities for task allocation scenario [Abstract, page 9 lines 7-28 and figs 7, 8A and 8B]. The usage of devices in each task are interpreted as activities.
 - c. computing the consumption associated with said activities [Abstract, page 9 lines 7-28 and figs 7, 8A and 8B].
8. Referring to claim 6, Sunakawa teaches receiving a task list describing the tasks to be executed and a task model describing the tasks [page 9 lines 7-28 and figs 7, 8A and 8B].
9. Referring to claim 7, Sunakawa teaches including initial estimates for each task [page 9 lines 7-28 and figs 7, 8A and 8B].
10. Referring to claim 8, Sunakawa teaches priority constraints for each task [Abstract and page 9 lines 29-32 and figs. 7 and 8C].
11. Referring to claim 9, Sunakawa teaches including information regarding possible degradations associated with one or more of the tasks in the task list [page 3 lines 34-41]. Priority is interpreted as information regarding possible degradations.
12. Referring to claim 10, Sunakawa teaches computing the energy consumption associated with the activities [page 4 lines 39-42]. Average power and energy are interpreted to be the same since both describe power over a given time period.

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13. Referring to claim 11, Sunakawa teaches computing the power consumption associated with the activities [Abstract].

14. Claims 12-22 are the apparatus claims which follow the methods of claims 1-12 and are therefore rejected on the same basis as set forth hereinabove.

15. Claim 23 is drawn to the methods of claims 1, 5-6 and 9 and is therefore rejected on the same basis as set forth hereinabove.

16. Claim 24 is drawn to the methods of claims 12, 16-17 and 20 and is therefore rejected on the same basis as set forth hereinabove.

Conclusion

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). *necessitated by amendment*

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Connolly whose telephone number is (703) 305-7849. The examiner can normally be reached on M-F 8AM-5PM (except every first Friday).


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C Lee can be reached on (703) 305-9717. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mark Connolly
Examiner
Art Unit 2115

mc
February 20, 2004


JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100